MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Philips Products
3221 Magnum Drive
Elkhart, Indiana 46516

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-14462-00128	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: October 25, 2001

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Malfunction Report

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates steel doors, RV doors, storm doors and vinyl windows manufacturing plant.

Authorized Individual:	Mr. Dennis K. Ruben
Source Address:	3221 Magnum Drive, Elkhart, Indiana 46516
Mailing Address:	3221 Magnum Drive, Elkhart, Indiana 46516
Phone Number:	(219) 296-0000
SIC Code:	3442, 3089
County Location:	Elkhart
County Status:	Maintenance for ozone Attainment area for all other criteria pollutants
Source Status:	Minor Source, under PSD

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

Plant 1 - located at 3221 Magnum Drive, Elkhart, Indiana:

(a) One (1) RV doors production line, with a maximum production rate of 70 units per hour. This line includes the following operations:

(1) Inner frame steel cutting with a maximum cutting rate of 240 pounds per hour;
(2) Skin foam cutting with a maximum cutting rate of 120 pounds per hour;
(3) Outer frame aluminum cutting with a maximum cutting rate of 890 pounds per hour;
(4) Surface coating using aerosol and plews cans at a maximum rate of 70 units per hour

(b) One (1) vinyl windows production line for RVs and homes with a maximum production rate of 75 units per hour. This line includes the following operations:

(1) Spacer cutting with a maximum cutting rate of 75 pounds per hour;
(2) Grid cutting with a maximum cutting rate of 25 pounds per hour;
(3) Glass cutting with a maximum cutting rate of 1400 pounds per hour;
(4) Frame parts cutting with a maximum cutting rate of 200 pounds per hour;
(5) Sash parts cutting with a maximum cutting rate of 100 pounds per hour;
(6) Weld frame through heat fusion and surface coating.

(c) One (1) home HTD/storm door production line with a maximum production rate of 20 units

per hour. This line includes; metal cutting with a maximum cutting rate of 450 pounds per hour, application of sealant, and woodworking operation which is controlled by baghouse DC1;

(d) Two (2) natural gas-fired applied air heating unit, identified as S3 and S7 each has a heat input capacity of 3.125 million British Thermal Units per hour (mmBtu/hr);

(e) One (1) natural gas-fired rapid air make-up unit, identified as S9 with a heat input capacity of 3.3 mmBtu/hr; and

(f) PM/PM10 emissions from the MH/RV fiberglass, steel, aluminum, foam cutting, routing and woodworking operations are controlled by dust collectors DC2 and DC3;

Plant 2 - located at 1000 Sako Court, Elkhart, Indiana:

(a) One (1) wood stiles assembly area, with a maximum capacity of 125 doors per hour, equipped with one (1) baghouse for particulate control;

(b) One (1) door core foam filling operation; and

(c) Four (4) volatile organic liquid (VOL) storage tanks, each with a maximum capacity of 2,000 gallons, and each with an annual throughput of 35,000 gallons per year.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is **not** required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is not a major source, as defined in 326 IAC 2-7-1(22);

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled “Minor Source Operating Permit”, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1, when, prior to start of operation, the following requirements are met:

(a) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

(b) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date of this permit. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The total source potential to emit of particulate matter (PM) and particulate matter less than 10 microns (PM10) are each less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ, IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a

notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.9 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the

end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.11 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.12 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.13 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or

contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) A malfunction as described in 326 IAC 1-6-2; or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.15 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Plant 1 - located at 3221 Magnum Drive, Elkhart, Indiana:

(a) One (1) RV doors production line, with a maximum production rate of 70 units per hour. This line includes the following operations:

(1) Inner frame steel cutting with a maximum cutting rate of 240 pounds per hour;
(2) Skin foam cutting with a maximum cutting rate of 120 pounds per hour;
(3) Outer frame aluminum cutting with a maximum cutting rate of 890 pounds per hour;
(4) Surface coating using aerosol and plews cans at a maximum rate of 70 units per hour

(b) One (1) vinyl windows production line for RVs and homes with a maximum production rate of 75 units per hour. This line includes the following operations:

(1) Spacer cutting with a maximum cutting rate of 75 pounds per hour;
(2) Grid cutting with a maximum cutting rate of 25 pounds per hour;
(3) Glass cutting with a maximum cutting rate of 1400 pounds per hour;
(4) Frame parts cutting with a maximum cutting rate of 200 pounds per hour;
(5) Sash parts cutting with a maximum cutting rate of 100 pounds per hour;
(6) Weld frame through heat fusion and surface coating.

(c) One (1) home HTD/storm door production line with a maximum production rate of 20 units per hour. This line includes; metal cutting with a maximum cutting rate of 450 pounds per hour, application of sealant, and woodworking operation which is controlled by baghouse DC1;

(d) Two (2) natural gas-fired applied air heating unit, identified as S3 and S7 each has a heat input capacity of 3.125 million British Thermal Units per hour (mmBtu/hr);

(e) One (1) natural gas-fired rapid air make-up unit, identified as S9 with a heat input capacity of 3.3 mmBtu/hr; and

(f) PM/PM10 emissions from the MH/RV fiberglass, steel, aluminum, foam cutting, routing and woodworking operations are controlled by dust collectors DC2 and DC3;

Plant 2 - located at 1000 Sako Court, Elkhart, Indiana:

(a) One (1) wood stiles assembly area, with a maximum capacity of 125 doors per hour, equipped with one (1) baghouse for particulate control;

(b) One (1) door core foam filling operation; and

(c) Four (4) volatile organic liquid (VOL) storage tanks, each with a maximum capacity of 2,000 gallons, and each with an annual throughput of 35,000 gallons per year.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D 1.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

The VOC potential emissions from the Vinyl Windows Production Line are less than 25 tons per year. Therefore, the Best Available Control Technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply. Any change or modification which may increase the Vinyl Windows Production Line VOC potential emissions to 25 tons per year or more shall obtain OAQ approval before such change may occur.

D.1.2 Hazardous Air Pollutant (HAPs) [326 IAC 2-7]

The single HAP and combined HAPs potential emissions from the source are less than 10 tons per year and 25 tons per year respectively. Therefore, 326 IAC 2-7 (Part 70 Permit Program) does not apply. Any change or modification which may increase each single HAP or combined HAPs emissions to 10 tons per year or more or 25 tons per year or more from the source shall obtain OAQ approval before such change may occur, and be subject to 326 IAC 2-7.

D.1.3 Volatile Organic Compounds (VOCs) [326 IAC 8-2-9]

The actual volatile organic compound (VOC) emissions from the metal HTD storm door production line, and the RV door production lines are each less than 15 pounds per day before add-on control. Therefore 326 IAC 8-2-9 (Miscellaneous Metal Coating) does not apply. Any change which may increase each actual VOC emissions from these production lines shall obtain OAQ approval before such change may occur, and be subject to 326 IAC 8-2-9.

D.1.4 Particulate Matter 326 IAC 6-3-2 (Process Operations)

(a) Pursuant to 326 IAC 6-3-2, the PM emissions from the HTD Storm Door production line, RV Door Production Line and the RV's and Homes Vinyl Window Production Line when using spray type application system, and shall be limited using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3-2, the PM emissions from the source operations shall be limited as follows:

Process	Process Weight Rate (ton/hr)	PM Allowable (lb/hr)
Welding	0.0008	0.551
Storm & RV Doors Woodworking	0.01	0.551
Wood Stiles Assembly	0.3815	2.15
Material Cutting and Routing	0.985	4.05

The above PM emission limits shall be determined using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test the above emission units by this permit. However, IDEM

may require compliance testing when necessary to determine if the emission units are in compliance. If testing is required by IDEM compliance with the PM limit specified in Condition D.1.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.7 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC and HAP content and usage limitations contained in Conditions D.1.1, D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1, D.1.2 and D.1.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1, D.1.2 and D.1.3.

(1) The amount, VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The cleanup solvent usage for each month;

(4) The total VOC usage each month for coatings used in the storm door and RV door production lines;

(5) The total VOC usage each month for coatings used in coating vinyl windows; and

(6) The weight of VOCs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Philips Products**
Address:	**3221 Magnum Drive**
City:	**Elkhart,**
Phone #:	**(219) 296-0000**
MSOP #:	**069-14462-00128**

I hereby certify that Philips Products, Inc. is
9 still in operation.
9 no longer in operation.

I hereby certify that Philips Products, Inc. is
9 in compliance with the requirements of MSOP 069-14462-00128.
9 not in compliance with the requirements of MSOP 069-14462-00128.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:___Philips Products_____PHONE NO. (219) 296-0000_____
LOCATION: (CITY AND COUNTY)__Elkhart, Elkhart____
PERMIT NO. _MSOP 039-14462_____ AFS PLANT ID: _039-00128_____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

PAGE 1 OF 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

PAGE 2 OF 2

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name:	Philips Products
Source Location:	3221 Magnum Drive, Elkhart, Indiana 46516 and 1000 Sako Court, Elkhart, Indiana 46516
County:	Elkhart
SIC Code:	3442, 3089
Operation Permit No.:	039-14462-00128
Permit Reviewer:	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed an application from Philips Products relating to the operation of a plant that manufactures steel doors, RV doors, storm doors and vinyl windows. The plant consists of the following facilities:

Plant 1 - located at 3221 Magnum Drive, Elkhart, Indiana:

(a) One (1) RV doors production line, with a maximum production rate of 70 units per hour. This line includes the following operations:

(1) Inner frame steel cutting with a maximum cutting rate of 240 pounds per hour;
(2) Skin foam cutting with a maximum cutting rate of 120 pounds per hour;
(3) Outer frame aluminum cutting with a maximum cutting rate of 890 pounds per hour;
(4) Surface coating using aerosol and plews cans at a maximum rate of 70 units per hour

(b) One (1) vinyl windows production line for RVs and homes with a maximum production rate of 75 units per hour. This line includes the following operations:

(1) Spacer cutting with a maximum cutting rate of 75 pounds per hour;
(2) Grid cutting with a maximum cutting rate of 25 pounds per hour;
(3) Glass cutting with a maximum cutting rate of 1400 pounds per hour;
(4) Frame parts cutting with a maximum cutting rate of 200 pounds per hour;
(5) Sash parts cutting with a maximum cutting rate of 100 pounds per hour;
(6) Weld frame through heat fusion and surface coating.

(c) One (1) home HTD/storm door production line with a maximum production rate of 20 units per hour. This line includes; metal cutting with a maximum cutting rate of 450 pounds per hour, application of sealant, and woodworking operation which is controlled by baghouse DC1;

(d) Two (2) natural gas-fired applied air heating unit, identified as S3 and S7 each has a heat input capacity of 3.125 million British Thermal Units per hour (mmBtu/hr);

(e) One (1) natural gas-fired rapid air make-up unit, identified as S9 with a heat input capacity of 3.3 mmBtu/hr; and

(f) PM/PM10 emissions from the MH/RV fiberglass, steel, aluminum, foam cutting, routing and woodworking operations are controlled by dust collectors DC2 and DC3;

Plant 2 - located at 1000 Sako Court, Elkhart, Indiana:

(a) One (1) wood stiles assembly area, with a maximum capacity of 125 doors per hour, equipped with one (1) baghouse for particulate control;

(b) One (1) door core foam filling operation; and

(c) Four (4) volatile organic liquid (VOL) storage tanks, each with a maximum capacity of 2,000 gallons, and each with an annual throughput of 35,000 gallons per year.

Source Definition

This steel doors, RV doors, storm doors, and vinyl windows manufacturing company consists of two (2) plants:

(a) One plant is located at 3221 Magnum Drive, Elkhart, Indiana 46516; and

(b) One other plant is located at 1000 Sako Court, Elkhart, Indiana 46516.

Since the two (2) plants are located in contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source.

Existing Approvals

The plant located at 3221 Magnum Drive in Elkhart has been operating under construction permit CP 039-2283, Plt ID 039-00128 using the old name Tomkins Industries. The plant located at 1000 Sako Court in Elkhart has been issued Exemption No.: 039-12022-00535 on July 19, 2000.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 25, 2001, with additional information received on June 11, 2001 and August 1, 2001.

Emission Calculations

Plant 1- 3221 Magnum Drive, Elkhart:

(a) Natural Gas Combustion: See page 1 of 3 TSD Appendix A for detailed calculations.

(b) Process Emissions:

(1) **Surface Coating:** See Page 2 and 3 of TSD Appendix A for detailed calculations.

(2) **Welding:**

Welding Type	Throughput (lb/hr)	Emission Factor (lb/1000 lb)	PM/PM10 Emissions (tons/year)
Steel ER70S-3	1.2	5.2	0.03
Aluminum ER5356	0.4	4.1	0.04

Methodology:
Emissions = throughput, lb/hr * Ef lb/1000 lb * 8760 hrs/yr * ton/2000 lb

(3) **PM/PM10 Emissions from HTD Storm Door Woodworking Operation:**

Using the dust collected from baghouses DC1, DC2, and DC3:
Individual Baghouse Control Efficiency - 99%

DC1 Dust Collected = 1.7 lbs/hr
= 7.4 tons/yr

PM/PM10 Emissions before DC1 = 7.4 tons/yr /0.99
= 7.5 tons/yr

PM/PM10 Emissions after DC1 = 7.5 ton/yr (1-0.99)
= 0.075 ton/yr

(4) **PM/PM10 Emissions from Mobile Homes and Recreational Vehicle (MH/RV) fiberglass, steel, aluminum and foam cutting and routing:**

DC2 Dust Collected = 13 lbs/hr
= 56.9 tons/yr

PM/PM10 Emissions before DC2 = 56.9 tons/yr /0.99
= 57.5 tons/yr

PM/PM10 Emissions after DC2 = 57.5 tons/yr (1-.99)
= 0.575 ton/yr

(5) **PM/PM10 Emissions from MH/RV Woodworking Operation:**

DC3 Dust Collected = 1.7 lbs/hr
= 7.4 tons/yr

PM/PM10 Emissions before DC3 = 7.4 tons/yr /0.99
= 7.5 tons/yr

PM/PM10 Emissions after DC3 = 7.5 (1-0.99)
= 0.075 ton/yr

Plant 2 - 1000 Sako Court, Elkhart:

(a) Process Emissions:

(1) PM/PM10 Emissions from Wood Stiles Assembly Area:

Woodworking Baghouse	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft^2	Total Filter Area (ft^2)	Control Efficiency	Total Uncontrolled (tons/yr)	Total Controlled (tons/yr)
36PJD8	1	0.00010	9.2	358	99.90%	12.37	0.01

Methodology:
Uncontrolled PM/PM10 Emissions = No. of Units * grain loading/acf) * air/cloth ratio, acfm/ft^2 * filter area, ft^2 * lb/7000 grains * 60 min/hr * 8760 hrs/yr * ton/2000 lb * 1/(1-control eff)

Controlled PM/PM10 Emissions = No. of Units * grain loading/acf) * air/cloth ratio, acfm/ft^2 * filter area, ft^2 * lb/7000 grains * 60 min/hr * 8760 hrs/yr * ton/2000 lb

(b) Door Core Foam Filling:
Wet foam which is filled into doors which consists of polyurethane, and Diphenyl methane diisocyanate (MDI). HCFC-22, ozone depleting substance (ODS) is used as a blowing agent to make the foam completely expands and fills the void in the hallow door panel foam and hardens to provide the required insulation and rigidity.

MDI Emissions:
MDI which is both a HAP and VOC is emitted at a negligible level since it is completely reacted to from the polyurethane foam. The issued Exemption Letter 039-12022-00535 consistently stated that MDI is emitted at 0.004 pounds per hour (0.017 ton/yr).

HCFC-22 Emissions:
Wet Chemical Usage Rate: 625 lbs/hr
Ozone-depleting substance (ODS) emissions are estimated based on the partial loss of blowing agent during injection and foam curing. **Emission factor of 1%** was determined based on the following test:

The door was weighed prior to foam filling. The wet chemical to be injected or poured was also weighed. The door was weighed again after it was filled with foam and cured. **One (1) percent** was determined to be lost and emitted.

HCFC-22 Emissions = 625 lbs/hr of wet chemical * 1% * 8760 hr/yr * ton/2000 lb
= 27.4 tons HCFC-22/yr

(c) Four VOL Storage Tanks: See Tanks 4.0 Program for detailed calculations
Since all the tanks have the same capacity, the worst VOL was used in the Tanks Program calculations.

The VOC emissions from the tanks = 0.08 lbs/yr * 4 tanks * ton/2000 lb
= 1.6×10^{-4}

SUMMARY OF EMISSIONS (TONS/YEAR)												
Pollutant	Natural Gas Combustion	Surface Coating	Door Foam Filling	Welding	Uncontrolled Woodworking	Controlled Woodworking	Uncontrolled MH/RV vinyl, Steel, Aluminum, and Foam Cutting and Routing	Controlled MH/RV Fiberglass, Steel, Aluminum, and Foam Cutting and Routing	Uncontrolled MH/RV Woodworking	Controlled MH/RV Woodworking	Total Uncontrolled PTE	Controlled PTE
PM	0.1	4.41	0.0	0.07	19.87	0.085	57.5	0.575	7.5	0.075	89.45	5.31
PM10	0.3	4.41	0.0	0.07	19.87	0.085	57.5	0.575	7.5	0.075	89.45	5.31
VOC	0.2	6.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.21	6.21
NOx	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	4.2
SO2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CO	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
Worst Single HAP	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	5.8
Worst Combined HAPs	0.0	5.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.88	5.88
HCFC-22 ODS	0.0	0.0	27.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4	27.4

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	89.45
PM-10	89.45
SO_2	0.0
VOC	6.21
CO	3.5
NO_x	4.2
HCFC-22 Ozone Depleting Substance (ODS)	27.4

HAP's	Potential To Emit (tons/year)
Toluene	5.80
MEK	0.08
TOTAL	5.88

Justification for Permit Level

This existing source is subject to 326 IAC 2-6.1, Minor Source Operating Permit, since its potential to emit (PTE) is at levels greater than 25 tons per year of particulate matter (PM) and particulate matter less than ten (10) microns (PM10).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1995 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.0
PM-10	0.0
SO_2	0.0
VOC	3.0
CO	0.0
NO_x	0.0
HAP (specify)	0.0

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	maintenance
CO	attainment
Lead	not determined

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40

CFR 52.21.

(b) Elkhart County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing re-permitted source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Emissions (ton/yr)
PM	5.31
PM10	5.31
SO_2	0.0
VOC	6.21
CO	3.5
NO_x	4.2
HCFC-22 (ODS)	27.4

(a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

(a) 326 IAC 2-7 (Part 70 Permit Program)
Based on the facilities permitted under construction permit CP039-2283, and the use of lacquer thinner the source would be subject to the Part 70 permit Program, because single HAP was emitted at greater than 10 tons per year. However, on September 15, 1994, the source sent a letter to IDEM, stating their intention of not filing a Part 70 permit since the source is no longer subject to the program because of the elimination of the following permitted facilities: 2 Paint Booths, 1 Glue Spray Booths used for lamination and painting doors. The Glue Spray Booth has been replaced by an Hot Melt Glue Line.

With the elimination of the two (2) paint booths no painting is done at the source except for Touch-Up. Caulking, woodworking, and material cutting are also involved in the process. With these changes including the elimination of the lacquer thinner for cleaning, the source is **no longer** subject to the Part 70 Permit Program because the potential to emit (PTE) of:

(1) each criteria pollutant is less than 100 tons per year,
(2) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(3) any combination of HAPs is less than 25 tons/year.

This existing source is being re-permitted based on 326 IAC 2, the “New Reform Rules”

Federal Rule Applicability

(a) New Source Performance Standards (NSPS):
(1) 326 IAC 12, 40 CFR Part 60.110b, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or modification Commenced

After July 23, 1984. The four (4) VOL storage tanks are not subject to this NSPS, because each tank capacity is less than forty (40) cubic meters (m^3).

(2) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) National Emission Standards for Hazardous Air Pollutants (NESHAPs):
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

(a) 326 IAC 2-6 (Emission Reporting)
This source, which is located in Elkhart County is not subject to 326 IAC 2-6 (Emission Reporting), because its VOC potential to emit is less than ten (10) tons per year, or no other pollutant has a PTE of one hundred (100) tons per year.

(b) 326 IAC 5-1 (Visible Emissions Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

(a) 326 IAC 8-1-6 (General reduction Requirements)
This rule applies to new facilities as of January 1, 1980, which have potential Volatile Organic Compounds (VOC) emissions of 25 tons or more per year, which are not otherwise regulated by other provisions of Article 8.

(1) The vinyl window production line is not subject to 326 IAC 8-1-6, because VOC potential emissions are less than 25 tons per year.

(2) Although the Door Core foam Filling operation emits HCFC-22 (ODS) at levels greater than 25 tons per year, it is **not** subject to this rule because HCFC-22 (ODS) is not a VOC, it is a non-photochemically reactive hydrocarbon.

(b) 326 IAC 8-2-9 (Miscellaneous Metal Coating)

(1) The HTD storm door production line operates at an actual operating hours of 2,574 hours per year. Based on this actual hours of operation, the line has an actual VOC emissions of 3.3 pounds per day, which is less than 15 pounds per day, before add-on control. Therefore, it is not subject to 326 IAC 8-2-9.

(2) The RV door production line operates at an actual operating hours of 5,148 hours per year. Based on this actual hours of operation the line has an actual VOC emissions of 11.4 pounds per day, which is less than 15 pounds per day. Therefore, it is not subject to 326 IAC 8-2-9.

(c) 326 IAC 2-4.1-1 (New Source Toxics Control)
This rule is not applicable to the source because the source is existing prior to July 27,

1997, the applicability date of the rule and it is not a major source for HAPs.

(d) 326 IAC 6-3-2 (Process Operations)

(1) This rule mandates a PM emission limit from the HTD Storm Door production line, RV Door Production Line and the RV's and Homes Vinyl Window Production Line when using spray type application system, and shall be limited using the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

(2) 326 IAC 6-3 mandates a PM emission limit from the following facilities using below equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Process	Process Weight Rate (ton/hr)	PM Allowable (lb/hr)
Welding	0.0008*	0.551
Storm & RV Doors Woodworking	0.01*	0.551
Wood Stiles Assembly	0.3815	2.15
Material Cutting and Routing	0.985	4.05

Note: * - for process weight rate less than 100 lb/hr (0.05 ton/hr), the PM emission limit is 0.551 lb/hr.

The source is in compliance with the PM limits using control for the woodworking, wood stiles assembly and material cutting and routing. The welding has a lower PM PTE than what is allowed.

(e) 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)
Pursuant to 326 IAC 8-9-1 (a) and (b), stationary vessels used to store volatile organic liquid, located in Clark, Floyd, Lake, or Porter County, and are less than thirty-nine thousand (39,000) gallons, are subject to the reporting and record keeping provisions of 326 IAC 8-9-6(a) and (b). This rule does not apply to the four (4) volatile organic liquid (VOL) storage tanks because the source is located in Elkhart County.

(f) 326 IAC 6-2 (PM Emissions Limit for Indirect Heating)
The various natural gas-fired air heating and make-up units are not subject to 326 IAC 6-2 because they are not sources of indirect heating.

Conclusion

The operation of this steel door, vinyl window, and storm door manufacturing plant shall be subject to the conditions of the attached **Minor Source Operating Permit No.: 039-14462-00128.**

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

2 applied air heating unit
@ 3.125 mmBtu/hr
1 rapid air make-up unit
@ 3.3 mmBtu/hr

Company Name: Philips Products
Address City IN Zip: 3221 Magnum Dr., Elkhart, Indiana 46515
MSOP No.: 039-14462-00128
Reviewer: Aida De Guzman
Date Application Received: May 25, 2001

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
9.6	83.7

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.3	0.0	4.2	0.2	3.5

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Philips Products
Address City IN Zip: 3221 Magnum Dr., Elkhart, IN 46516
MSOP No.: 039-14462-00128
Reviewer: Aida De Guzman
Date Application Received: May 25, 2001

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Substrate	Transfer Efficiency
HTD Storm Door Production Line																	
(HTD Main Line) SM5504	8.26	42.00%	0.0%	42.0%	0.0%	57.00%	0.00200	20.000	3.47	3.47	0.14	3.33	0.61	0.00	0.00	Wood & Aluminum	100%
(HTD 7000) SM5504	8.26	42.00%	0.0%	42.0%	0.0%	57.00%	0.00344	20.000	3.47	3.47	0.24	5.73	1.04	0.00	0.00	Wood & Aluminum	100%
(HTD 87) SM5504	8.26	42.00%	0.0%	42.0%	0.0%	57.00%	0.00687	20.000	3.47	3.47	0.48	**11.45**	**2.09**	0.00	0.00	Aluminum	100%
SM5504	8.26	42.00%	0.0%	42.0%	0.0%	57.00%	0.00025	70.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Aluminum	100%
Raabe Paint	7.4	92.00%	0.0%	92.0%	0.0%	8.00%	0.00030	130.000	6.80	6.80	0.27	6.36	1.16	**0.03**	84.99	Aluminum	75%
RV Door Production Line																	
SM5504	8.26	42.00%	0.0%	42.0%	0.0%	57.00%	0.00333	70.000	3.47	3.47	0.81	**19.39**	**3.54**	0.00	0.00	Aluminum	100%
3M Super 77	8.8	75.00%	0.0%	75.0%	0.0%	25.00%	0.00128	70.000	6.59	6.59	0.59	14.16	2.58	**0.22**	26.34	Foam & Steel	75%
Perma Lok MM15	8.9	1.00%	0.0%	1.0%	0.0%	99.00%	0.00002	70.000	0.09	0.09	0.00	0.00	0.00	0.01	0.09	Aluminum	75%
Raabe Paint	7.4	92.00%	0.0%	92.0%	0.0%	8.00%	0.00030	70.000	6.80	6.80	0.14	3.43	0.63	0.01	84.99	Steel	75%
Purfect Lok 34-9022	8.8	2.00%	0.0%	2.0%	0.0%	0.00%	0.00625	70.000	0.18	0.18	0.08	1.85	0.34	**4.13**	ERR	Foam, Fiberglass & Steel	75%
Vinyl Windows for Rv's & Homes																	
Raabe Paint	7.4	92.00%	0.0%	92.0%	0.0%	8.00%	0.00017	75.000	6.80	6.80	0.09	2.08	**0.38**	**0.01**	84.99	Vinyl	75%
SM5504	8.26	42.00%	0.0%	42.0%	0.0%	57.00%	0.00030	75.000	3.47	3.47	0.08	**1.87**	0.34	0.00	0.00	Vinyl	100%
State Potential Emissions			**Add worst case coating to all solvents**									**32.96**	**6.01**	**4.41**			

Note: SM5504 is a caulking material that is applied by hand squeezing, therefore transfer efficiency is 100%. The rest of the materials are applied via aerosol cans.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Philips Products
Address City IN Zip: 3221 Magnum Dr., Elkhart, IN 46516
MSOP No.: 039-14462-00128
Permit Reviewer: Aida De Guzman
Date: May 25, 2001

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % MDI	Weight % MEK	Weight % Hexane	Weight % Glycol Ethers	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	MDI Emissions (ton/yr)	MEK Emissions (ton/yr)	Hexane Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)
HTD Storm Door Production Line																	
(HTD Main Line) SM5504	8.26	0.00200	20.000	0.00%	42.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.61	0.00	0.00	0.00	0.00	0.00
(HTD 7000) SM5504	8.26	0.00344	20.000	0.00%	42.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	1.04	0.00	0.00	0.00	0.00	0.00
(HTD 87) SM5504	8.26	0.00687	20.000	0.00%	42.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	**2.10**	0.00	0.00	0.00	0.00	0.00
SM5504	8.26	0.00025	70.000	0.00%	42.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raabe Paint	7.39	0.00030	130.000	1.30%	9.23%	0.00%	6.50%	0.00%	0.00%	0.00%	**0.00**	0.12	0.00	**0.08**	0.00	0.00	0.00
RV Door Production Line																	
SM5504	8.26	0.00330	70.000	0.00%	42.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	**3.51**	0.00	0.00	0.00	0.00	0.00
'3M Super 77	8.78	0.00128	70.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perma Lok MM15	8.91	0.00002	70.000	0.00%	0.00%	2.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raabe Paint	7.39	0.00030	70.000	1.30%	9.23%	0.00%	6.50%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purfect Lok 34-9022	8.8	0.00625	70.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vinyl Windows for Rv's & Homes														0.00	0.00	0.00	0.00
Raabe Paint	7.39	0.00030	75.000	1.30%	9.23%	0.00%	6.50%	0.00%	0.00%	0.00%	**0.0**	0.00200	0.00	0.00	0.00	0.00	0.00
SM5504	8.26	0.00017	75.000	0.00%	42.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	**0.19**	0.00	0.00	0.00	0.00	0.00
Total State Potential Emissions											**0.00**	**5.80**	**0.00**	**0.08**	**0.00**	**0.00**	**0.00**

Worst Single HAP **5.80**
Combined HAPs **5.88**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs